

## REMARKS

Claims 11-35 are pending in this application. Claim 35 has been rejected under 35 U.S.C. 112, 2d, as indefinite. Claims 11-35 have been rejected under 35 U.S.C. 103(a) as obvious over Olson (newly cited US patent 2,113,600) in view of Guedj US patent 5,871,356. Applicant respectfully traverses these grounds of rejection and requests reconsideration.

### **The Rejection Under 35 U.S.C. 103(a)**

Olson has been interpreted by the Examiner as having “a number of slots” defined by slot walls “related to the direction of rotation” defining “an angle alpha with the radial direction and slopes obliquely forward from within and outwardly in the direction of rotation.” With respect to claim 13, Mr. Woodall states that Olson’s “leading slot wall also slopes obliquely forward from within.”

Applicant respectfully disagrees with the Examiner’s characterization of the *single* slot of Olson. See Attachment A for the relative respective slot angles of Olson and the present invention. “A” is the slot wall and “R” is a radial line.

Olson cannot be characterized as sloping “obliquely forwardly,” as is defined in claim 11. Recess 18 of Olson definitely slopes obliquely *rearwardly*. The function of recess 18 in Olson is to enable leading screw section 24 to “yield toward section 20” (Col. 2, lines 42 and 43), resulting in increased cutting effectiveness of serrated edge 22.

Applicant’s device does not function in the same way nor for the same purpose. It is structurally different in that the device has “a number of through-penetrating slots,” “a cavity which opens out at said insertion end,” where “each slot connects the cavity with the outside of the anchoring portion,” and “the radially outermost part of said trailing slot wall defines an angle  $\alpha$  with the radial direction and slopes obliquely forwardly...in said direction of rotation.”

Olson is only a self threading fastener, unrelated to bone anchoring; it discloses no slots opening into a cavity (“through-penetrating slots”); which slots start at the “insertion end”; and where “each slot connects the cavity with the outside of said anchoring portion.” The specific slot parameters are identified in claim 11. With all these differences and unrelated aspects, Olson it is not a proper primary reference at all. At best, Olson is only

generally relevant to Applicant's invention, but not at all as to the specific limitations of claim 11.

Guedj was combined with Olson by the Examiner because it has "a cavity that opens out at an insertion end in communication with slots, wherein the cavity...widens conically in a direction towards the insertion end in order to guide bone shavings cut by the slots in the direction of the cavity." Applicant acknowledges the referred-to wording from col. 3, lines 11-18, of Guedj, but asserts that it misses by a long way from being combinable with Olson to make claim 11 obvious. Guedj shows "indentations 5, 6" which connect the "internal storage volume 3" with the outside of "wall 2."

A person of ordinary skill in the applicable technical field would have no reason to hollow out the insertion end of the Olson fastener, because it would serve no purpose. The single recess 18 of Olson is obliquely away from or rearward with respect to the direction of rotation, as discussed above. There is no teaching in Guedj about any such angle that would satisfy the limitations of claim 11. It should be noted again that the purpose of recess 18 in Olson is to create a cutting edge and allow portion 24 to "yield toward section 20" as it is forcibly screwed in to self-tap a hole in metal.

Another difference in function is that Olson is for self-tapping a hole in metal, while Applicant's fixture (and the Guedj instrument) scrape or grind away bone shavings to make room for the fixture or implant. The functions are so far removed from each other that the ordinarily skilled person would not look to Olson, and certainly would not combine these two references to arrive at the structure and to solve the problem addressed by Applicant.

In view of the fact that Olson does not meet the primary structural requirements of claim 11, Guedj cannot supply the missing elements. Guedj does have indentations (slots) that connect to a storage volume (cavity), but these indentations do not meet the specific characteristics defined in claim 11.

Claims 12-34 all depend from and serve to further define the invention of claim 11, and are therefore believed to be free of the cited prior art at least for the same reasons.

**The Rejection of Claim 35 Under 35 U.S.C. 112(2d)**

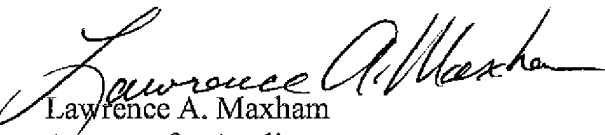
Applicant does not understand this ground of rejection. The Examiner states that this "claim does not set forth any steps involved in the method/process." Claim 35 continues to call for the step of "drilling a hole," and "screwing the fixture into the drilled hold." Why these are not process steps is not explained by the Examiner.

**CONCLUSION**

In view of the fact that the primary cited reference, as applied by the Examiner, has little relevance to the instant claims, and that there is nothing in the cited art which is sufficiently close to support a determination of obviousness, reconsideration and early passage to allowance are requested. Should any issues remain unresolved, Examiner Woodall is invited to telephone the undersigned attorney. The Commissioner is hereby authorized to charge any fees that arise in connection with this filing which are not covered by the money enclosed, or credit any overpayment, to Deposit Account No. 02-0460.

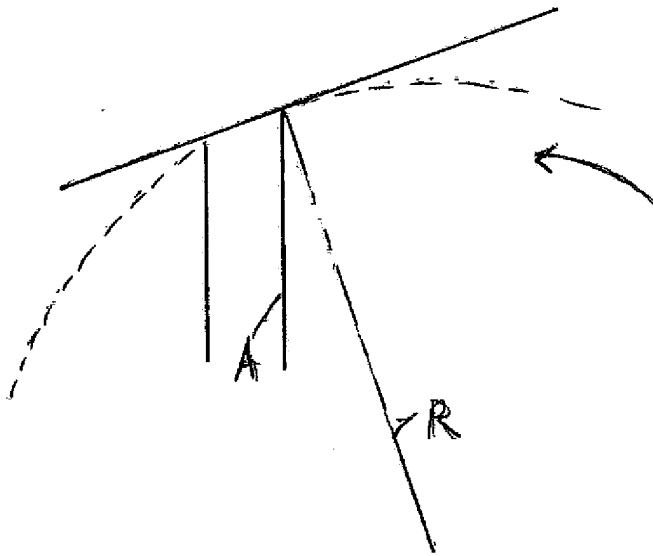
Respectfully submitted,

Per-Ingvar Brånemark

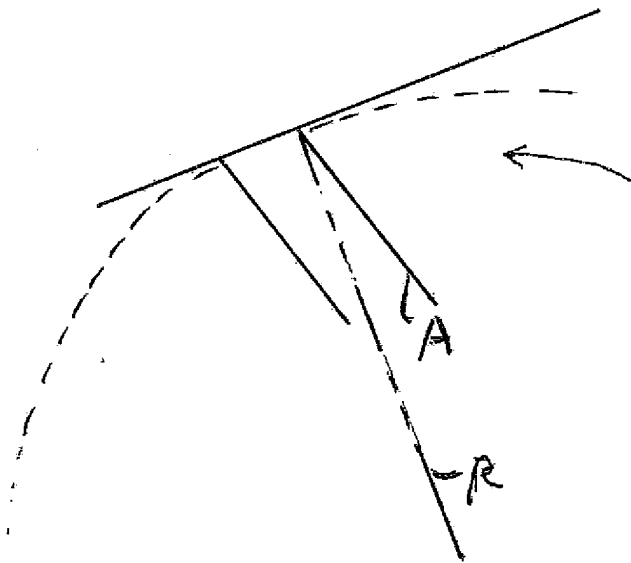
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# Attachment A



Olson



Invention

10/540,089